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ABBREVIATIONS	
CEDARE	Centre for Environment and Development for the Arab Regions and Europe
CSCP	Collaborating Centre for Sustainable Consumption and Production
ESC	Education for Sustainable Consumption
ESD	Education for Sustainable Development
GHG	Greenhouse Gas
IPCC	The Intergovernmental Panel on Climate Change of the United Nations
MEdIES	Mediterranean Education Initiative for Environment & Sustainability
MIO-ECSDE	Mediterranean Information Office for Environment, Culture and Sustainable Development
MSSD	Mediterranean Strategy for Sustainable Development
MSESD	Mediterranean Strategy on Education for Sustainable Development
SCP/RAC	Regional Activity Centre for Sustainable Consumption and Production
SDG	Sustainable Development Goal
UfM	Union for the Mediterranean
UNEA	United Nations Environment Assembly
UNEP	United Nations Environmental Programme
UNIDO	United Nations Industrial Development Organization
UNIMED	Unione delle Università del Mediterraneo

Foreword

The resolution adopted by the United Nations Environment Assembly (UNEA) on 15 March 2019, "invites all Member States and relevant stakeholders, as appropriate, to design and implement public policies, plans and programmes that support education and raise awareness of the importance of sustainable consumption, sustainable lifestyles and sustainable consumer behaviour, and those that develop related skills for academia and the private sector, including the financial sector".

Accordingly, this publication, developed by the Union for the Mediterranean (UfM), in collaboration with the Regional Activity Centre for Sustainable Consumption and Production (SCP/RAC) and the Mediterranean Information Office for Environment, Culture and Sustainable Development (MIO-ECSDE), aims to:

- 1. Contribute to the efforts to implement the UNEA Resolution, by analysing, linking and increasing the visibility of the work at a regional level for formal and non-formal Education for Sustainable Development (ESD) and for Sustainable Consumption (SC).
- 2. Show how Education for Sustainable Consumption (ESC) at the interface of both ESD and SC can contribute to shape and encourage sustainable consumption, behaviour and lifestyles in the Mediterranean region and beyond.
- 3. Serve as a guide to inspire decision makers and relevant actors and to support citizens to identify opportunities that decrease their environmental impact through simple, everyday actions.
- 4. Serve as a concrete contribution to the Mediterranean Strategy on Education for Sustainable Development, as approved, and as an important contribution to the UfM post 2020 agenda in line with the Sustainable Development Goals (SDGs).

The publication presents a collection of successful case studies to spark innovative ideas from educational centres, decision makers, stakeholders as well as **citizens** and to promote the adoption of sustainable actions. In addition, this work intends to inspire the aforementioned groups to take environmental action to decrease the impact of their current lifestyle. Accordingly, this booklet focuses on five main areas: **housing, mobility, food** (nutrition), **leisure and consumer goods.**

Sixteen case studies of noteworthy projects and initiatives were selected from Algeria, Egypt, France, Greece, Israel, Italy, Jordan, Lebanon, Malta, Morocco, Palestine, Spain and Tunisia. These cases represent just a small volume of the outstanding work already in place at a regional level, and further seeks to encourage other actors to take action in this area throughout the Mediterranean area.

This publication shows how both formal and non-formal education is equally important when it comes to the transfer of knowledge and ideas more intrinsically linked to consumption choices. To this extent, the authors also include a section that details a series of tools and sustainability platforms to further support this notion.

Finally, the publication concludes by delivering key messages extracted from concrete cases as well as ongoing projects to inspire **policy makers**, **educational institutions** and **other relevant stakeholders** to adopt and include elements of Education for Sustainable Consumption (ESC) directly into educational curricula and non-formal educational activities.



About Education on Sustainable Consumption, Behaviour and Lifestyles

Context and Policy Framework

In order to prevent some of the worst consequences of global warming, the Paris Agreement has established that the increase in global temperatures should stay well below 2°C above pre-industrial levels, and that efforts should pursue to limit it to 1.5 °C (UNFCC 2015). While the majority of research has focused on technological solutions such as efficiency improvements and negative carbon technologies, it has recently emerged that a substantial part of the mitigation effort should come from lifestyle changes (van den Bergh, 2013; IPCC, 2015; Alfredsson et al., 2018).

Behaviour changes can bring potentially quick greenhouse gas emissions savings, especially for those activities that don't require major infrastructural change (Lettenmeier, Laakso, and Toivio 2017). Individual lifestyles are, therefore, considered a major "potential agent for change in emissions" (IPCC, 2014, p. 388). A recent study estimated that by 2050, in order to meet the Paris obligations, GHGs emissions associated with individual lifestyles should decrease by 80-93% in developed countries and by 23-84% in developing countries (Institute for Global Environmental Strategies, 2019)

This implies a radical transformation of consumption patterns and cultural attitudes towards topics such as environmental sustainability and the governance and business models that shape them (Institute for Global Environmental Strategies, 2019).

Decision makers are thus responsible for architecting the appropriate frameworks and infrastructure (regulatory instruments, technological innovations, new public services) to promote, enable and enforce sustainable business practices. foster environmental education, support grassroots initiatives, as well as endorse changes in consumption patterns and lifestyle among constituents

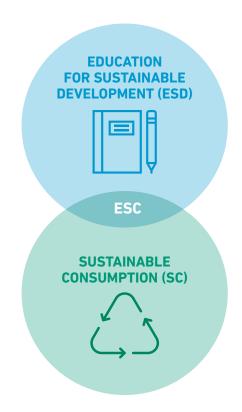


Fig1. Education for Sustainable Consumption is at the intersection of ESD and SC (Source: prepared by the authors)

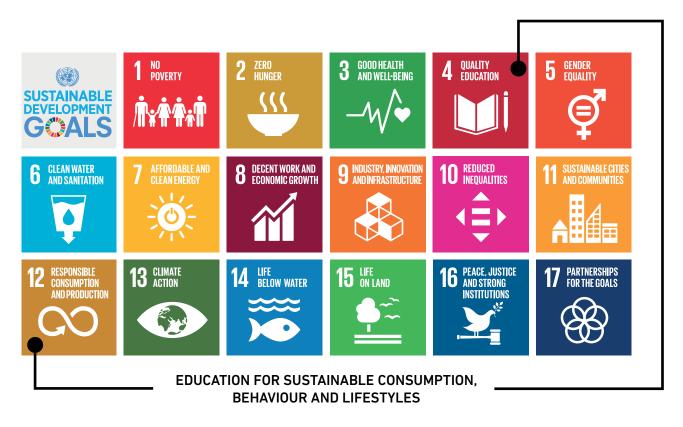


Fig 2. Sustainable Development Goals (SDGs) related to ESC (Source: prepared by the authors)

Education plays a central role in promoting the change to a more sustainable lifestyle, particularly in its ability to spread acquired knowledge about available alternatives, to raise awareness about climate change and environmental degradation, to motivate individuals to take responsibility for their impact and to change underlying social norms. Awareness resulting from education on sustainable lifestyles is vital to make these drastic lifestyle shifts acceptable.

The UfM, as part of its commitment towards the circular economy, and within the context of UNESCO's framework Education for Sustainable Development (ESD) for 2030, endorsed the Mediterranean Strategy on Education for Sustainable Development (MSESD) in 2014. The MSESD was scientifically and technically coordinated by the University of Athens/UNESCO Chair and Network on Sustainable Development Management and

Education in the Mediterranean and supported by the Mediterranean Educational Initiative on Environment and Sustainability (MEdIES) of the Mediterranean Information Office for Environment, Culture and Sustainable Development (MIO-ECSDE). The activities undertaken under the MSESD concur to the achievement of the Sustainable Development Goals (SDGs) by helping to make education a central part of the international response to climate change.

Moreover, in 2016, under the auspices, of SCP/RAC – UN Environment/MAP1, Mediterranean countries adopted the Regional Action Plan on Sustainable Consumption and Production in the Mediterranean. The Action plan indicates that "Despite the priority given to SCP in the regional and national policy agendas of the Mediterranean region, varying challenges continue to hinder the shift towards more sustainable patterns of production and consumption".

About Education for Sustainable Consumption, Behaviors and Lifestyles

In this context, Education for Sustainable Consumption (ESC) aims to provide citizens with the appropriate information and knowledge on the environmental and social impacts of their daily choices, as well as workable solutions and alternatives towards more sustainable lifestyles, by limiting inefficient use of resources and environmental degradation.¹.

To date, environmental ministries and educational institutions haven't reached a consensus whether to include elements of ESC in school curricula. Schools and educational centres that want to integrate ESC in their activities are thus challenged by the lack of an institutional framework to help guide its inclusion. In addition, an international

strategy for ESC could also benefit non-formal education initiatives, support sustainable initiatives and eco-innovation products and services (including workplace sustainability training, grassroots initiatives, etc.)².

In the next section, the report details 16 cases of ESC projects successfully implemented across the Mediterranean. They were chosen for their potential replicability with the purpose of inspiring policy makers to initiate similar activities and to further build on these experiences. The selection reflects a special focus on housing, nutrition and mobility, which constitute the lifestyle areas with the highest environmental footprint (above 70% of the total GHGs) (Institute for Global Environmental Strategies, 2019).

Fig 3. Main components and stakeholders (Source: prepared by the authors) **DEFINE INTERNATIONAL STRATEGIES REGIONAL AND INTERNATIONAL** MSSD, MSESD GOVERANCE PROMOTE AND FACILITATE THE IMPLEMENTATION OF THE STRATEGIES NATIONAL GOVERNMENTS Governmentes should assess and regularly follow up the implementation of the strategies at all levels of governance as well as create the appropiate frameworks and infraestructures. **IMPLEMENT THE STRATEGIES** Local educational authorities and institutions of formal **LOCAL EDUCATIONAL** education are encouraged to take on responsability **AUTHORITIES** for implementing the relevance strategies a local and regional levels. **INCLUDE ESD & ESC IN THE CURRICULA EDUCATIONAL INSTITUTIONS** Formal and non-formal education should include **SCHOOLS** a clear approach on sustainable development in order to promote sustainable consumption patterns and lifestyles. TAKE RESPONSABILITY SOCIETY Shift to a sustainable through local and daily actions.

¹ UNEP, 2010. HERE and NOW! Education for Sustainable Consumption Recommendations and Guidelines. 2 UNEP & UNESCO, 2016. Youth Xchange - Green skills and Lifestyles



The Green Demonstration Room

CASE I. HOUSING



An exhibition to raise awareness on the importance of energy efficiency, green buildings, water conservation and other environmental issues.

The Green Demonstration Room is located on the premises of the Centre of Research and Development in Jounieh, whereby students from public and private schools from all regions in Lebanon can visit and become acquainted with the concept of green buildings, the principles of energy efficiency, water conservation and other environmental issues. Since 2017, this educational project has been promoted by the Centre of Research and Development (affiliated with the Ministry of Education and High Education), the Makhzoumi Foundation and the Lebanon Green Building Council.

The project was founded as a solution to the lack of environmental centres as well as an attempt to educate and complement the existing education curricula of Lebanese children.

"It was a friend's initiative; a dream that remained as such for many years... But we kept on trying until it became true after eight years. You need to believe in your dreams. That is how we kept on bringing people on board."

Sallama Naamani, Makhzoumi Foundation

The main goal of the project is to increase public awareness on the importance of energy efficiency, water conservation and pollution reduction through the introduction of "green building" concepts. A green building provides healthy living and working conditions to tenants while lowering the environmental impact compared to a standard building.

In the Green Demonstration Room, visitors are guided through different thematic zones. These include spaces on renewable and energy saving technologies, indoor environmental quality, materials, featuring information on CO2 emissions and nature conservation.



Jounieh, Lebanon

The project also includes an outdoor space featuring a wind turbine, solar panel, a solar water heater, insulated wall sections, rainwater harvesting and a green wall to show the students' projects. Students are encouraged to use renewable energy technologies while their teachers or instructors are also trained on environmental issues.

The promoters of the initiative seek to create incentives to make immediate improvements and teach environmental-friendly solutions that can be developed at home, such as the installation of solar panels for heating water, tips to identify and compost waste, rainwater harvesting techniques and recommendations for house insulation. In the exhibition, the students can also estimate the impact from their daily activities through the CO2 calculator and learn the Reduce, Reuse, Recycle (3R) principle.

Lebanese students from all ages and backgrounds have visited the Green Demonstration Room. In 2018, the Green Demonstration Room was visited by 16 schools, 940 students and 100 educators. Since its opening, the Room has received more than 3,000 visits. In addition, more than 40 companies have shown interest in the project and participate in the initiative as sponsors.





✓ Efficient use of energy, water and materials



- ✓ Use of renewable energy technologies
- Protection of occupant health and improved productivity
- Reduction of waste, pollution and environmental degradation

THE OBJECTIVES OF THE GREEN DEMONSTRATION ROOM ARE THE FOLLOWING:

- Illustrate issues relating to environmental quality in an interactive way
- Demonstrate the concept and principles of Green Buildings and renewable energies
- Develop awareness among students regarding the principles of energy efficiency, water conservation and other environmental issues
- Provide training sessions for educators through different activities carried out or displayed in the Green Demonstration Room

After a few years of receiving visitors, the organisers have learned the importance of including parents in the educational activities, in order to raise a joint awareness within family units. The project not only targets students, parents and teachers but also encourages municipalities and local governments to start working on reducing their energy consumption and to acknowledge and address their water consumption.

The Green Demonstration Room follows an ambitious plan to continue with its educational activities in the medium term that includes the organisation of **hands-on workshops** and outdoor activities. Although in the planning stages, the Green Demonstration Room will be open to the general public, apart from the students, in order to increase the environmental awareness in the greater community. As this exhibition has been very successful since its founding, the coordinators hope to find alternative sources of funding and support from public administrations to replicate the initiative and open new Green Rooms around the country.

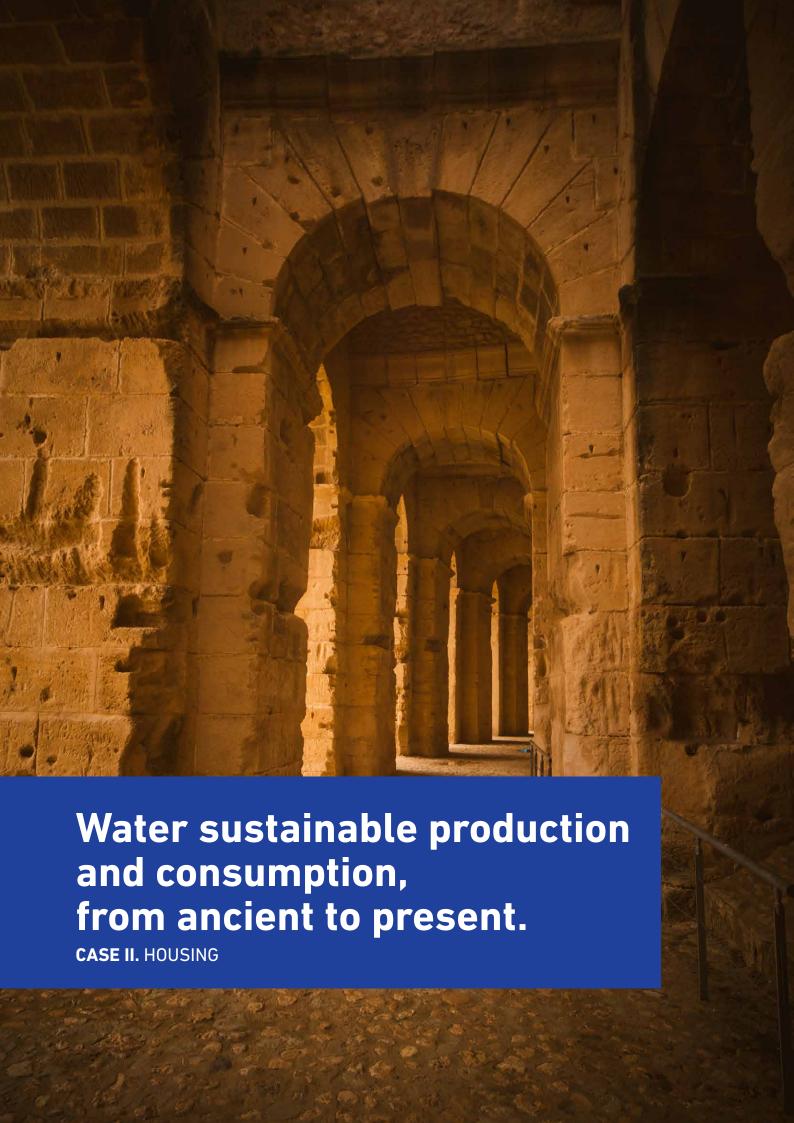
Contact: Sallama Namani, Makhzoumi

Foundation

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Further information:

http://www.lebanon-gbc.org/Component/ Projects/project.asp







An initiative to promote sustainable water consumption and production at home and schools by tracing the ancient methods of water management.

This initiative, promoted by the University of Manouba in collaboration with the Association de Sauvegarde de la Medina et du Patrimoine de Kelibia (ASMP), aims at mobilising young people in collaboration with schools (elementary level) to increase awareness regarding water consumption and its scarcity. The Institut National du Patrimoine and the Municipalité of Kelibia are also key stakeholders in this project.

The initiative focuses on tracing ancient methods of water management in the archaeological ruins of the punic city of Kerkouane (located outside of Kelibia) so the students can easily understand PAULthe process of water extraction and its different mechanisms such as such as aquifers, water tanks, water collection structures and wells. The visits to the ruins are organised by the schools and students are guided by their teachers in an interactive manner.



Kelibia, Tunisia



Special bathrooms to manage the water scarcity in punic houses.

Once the students learn the processes of water extraction from ancient times and modern technology, the next lesson is to understand the importance of saving water due to its scarcity. Seminars to raise environmental awareness at schools are provided in French and Arabic.

The initiative also seeks to involve students in solving the problem of the lack of water resources in their own schools. They find ways to save water by using rainwater for students' needs or gardening.

These lessons, along with a series of recommendations, are taken home by the students where they are inspired to change daily habits to reduce the water consumption.

The project encourages students to do home surveys on the topic including addressing their water consumption practices at home, what is the financial impact of the water economy on the family budget and the willingness to install water-saving faucets in their schools. The results of the surveys are later discussed at class among the students and teachers to find solutions and small actions than can have a greater and common impact.

In addition, some activities such as competitions are organised at schools between students to elaborate best practices and initiatives of production and sustainable consumption of water to encourage students to get fully involved in the solution.

This educational initiative not only proposes a sustainable solution to the water scarcity in schools and houses, particularly in the summer months, but also supports the local cultural heritage.

"In the current context of climate change, particularly sensitive in hot countries and arid dominant like Tunisia, sustainable development strategies and adaptation to water scarcity is imperative to revive good ancestral practices and values"

Habib Ben Boubaker, University of Manouba

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Further information:

http://www.hydriaproject.info/en/tunisiakerkouane-punic-city/relevance4/





Eco-School label: a simple and participatory methodology to engage schools in sustainable development.

Eco-Ecole -French for "Eco-Schools"- is an international education program for sustainable development (ESD), developed by the Foundation for Environmental Education. The Teragir Association launched the Eco-School program in 2005. The program aims to help students better understand the world around them in order to flourish and participate. The Eco-Schools global program consists of more than 50,000 committed schools in 67 countries worldwide.

Nearly 750 primary, middle and high schools have been labelled as Eco-schools this year in France. More and more schools are choosing to integrate sustainable development into their educational project and act concretely to reduce their ecological footprint. This move is based on the mobilization of all the actors of a school (students, teachers, management, administrative and technical staff, etc.) but also the surrounding community (civil society, associations, parents, etc.). Since its launch, the Eco-School program has been supported by the Ministry of Education.



France



To facilitate decision-making and make a long-term institutional commitment, the Eco-School program proposes 8 work themes (food, biodiversity, climate, waste, water, energy, health, solidarity and Agenda 2030) and invites participants to:

- Identify a priority theme each year in order to give the means to deepen and developactions based on the chosen theme.
- Gradually explore each theme and increase understanding. Year after year, the school selects new issues within sustainable development while sustaining the actions previously implemented. This helps to energize the project and create continuity to aid the learning process.

The Eco-School, Eco-College, Eco-Lycée label is awarded at the end of the year to noteworthy schools that meet certain sustainable requirements. By developing programs and participating in the competition for the label each year helps motivate students to innovate and think creatively. The label rewards the commitment and active mobilization of the school and brings visibility to the institution and their environmental actions or undertaken projects.

Schools that join the Eco-School network are advised upon registration and throughout their project to facilitate implementation. The initiative provides the schools with a complete guide and practical worksheets to accompany the school in facilitating or launching the project. It has a dedicated area on its website and unlimited access to its toolbox and all resources designed specifically for educational teams. The toolbox includes pedagogy material, media material, diagnostic sheets to evaluate carbon footprints, educational games, etc. In addition, the Eco-Ecole program relies on a team of professionals who provide advice and consultation on a daily basis to better guide schools in the deployment of their projects.

THE 7 STEPS TO BECOME AN ECO-SCHOOL:

- 1. Build a skilled team to guide the project
- 2. Undertake a study of your school, needs and carbon footprint
- 3. Define areas for improvement and take action
- 4. Measure and value its results
- 5. Adopt the project as a teaching aid
- 6. Increase awareness within the community
- 7. Mobilize more people through creativity

The activities organised by the schools include planting trees, recycling and waste sorting activities, building a pond to promote aquatic biodiversity, setting up an organic and locally produced menu in the canteen, measures to reduce water waste, anti-waste actions to reduce food wasted in the school's canteen, performing an energy efficiency diagnosis at their school and setting up an innovative virtual grain bank project.

So far, the initiative has been very successful and the feedback from schools and parents have been very positive. Over 86% of the schools observed an increase in student motivation regarding environmental topics and 3/4 parents found that their children have acquired new skills that help them lead a more sustainably lifestyle.

Further information:

https://www.eco-ecole.org/leau/





Did you know that every second breath we take comes from the ocean? Indeed, about half of the atmospheric oxygen comes from phytoplankton photosynthesis: without the oceans, life on earth could not exist as we know it. Actually, nearly all aspects of our lives are deeply connected to the ocean, no matter where we live.

Understanding the ocean's influence on us and our impact on the ocean is what Ocean Literacy is about and MIO-ECSDE and MEdIES have been running such initiatives for more than twenty years for citizens and other target groups to make informed and responsible decisions about it. The Ocean Literacy project was born to meet the several Sustainable Development Goals (SDG) such as 4. Quality Education, 6. Clean Water and Sanitation, 11. Sustainable Cities and Communities, 12. Responsible Consumption and Production, 13. Climate Change and 14. Life below Water.



Greece

From advocacy, policy formulation and awareness raising, to training educators and providing the appropriate learning materials for their students, to strengthening the capacities of professionals and citizens to properly monitor marine litter, the wideranging ocean literacy efforts of MIO-ECSDE inspire informed and responsible actions, at all levels.

TIPS CHALLENGES Knowledge is not enough for behaviour ———— Create opportunities for competence building, care and knowledge development change Low involvement and attraction of the — \longrightarrow Do not assume you know their needs. Emphasise personal relevance. Meet your audience audience where they are → Have the scientific evidence ready to reply General skepticism, credibility and usefulness of the campaign being to possible questions or have a team of questioned (a "so what?" mindset) skilled experts zero-cost ones inconvenience → Balance urgency with realistic hope and Inaction from society due to a catastrophic perception of the environmental present achievable goals threats Simplify the message, make it action Lack of engagement oriented, fun and collective Synergize with other initiatives Lack ofr resources

MIO-ECSDE OCEAN LITERACY INITIATIVES & OUTCOMES:

- Interreg Med PLASTICBUSTERS MPAs (2018-2022): 15 implementing partners and 17 associated partners from 6 countries.
- Mediterranean Action Day (2019): 7 NGOs from 5 countries ran participatory science initiatives on 23 beaches
- Erasmus+ KA1 mobility course (2018, 2019): 40 teachers and adult trainers received a week long intensive course on Marine Litter education in Athens
- Interreg Med ACT4LITTER (2017-2018): 4 editions of the marine litter watch month, 9 marine litter action plans, 1 decision-making tool to help MPA managers
- ENI SWIM-H2020 SM (2016-2019): beach litter assessment reports in 3 countries, some 200 professionals trained on marine litter monitoring and management from 8 countries via 3 national and 1 regional workshops, a peer-to-peer activity
- IPA-Adriatic DeFishGear (2013-2016): marine litter monitoring activities in 7 countries, a marine litter assessment report, an e-learning module on marine litter monitoring, a GIS database, 3 marine litter measures piloted
- EUFP7 MARLISCO (2014-2016): Educational Pack for secondary school level Know Feel Act! to Stop Marine Litter was developed in 16 languages. E-learning course for formal and non-formal educators on marine litter education ran in 4 rounds, trained totally 400 learners. Mobile exhibition on marine litter with more than 70 displays in 14 EU countries, reaching a total of tens of thousands of visitors.

In Greece alone, up until 2019 the exhibition has been displayed 15 times reaching \sim 11,000 visitors.

Many of these initiatives have a strong Education for Sustainable Development (ESD) component. Benefits of enhancing ocean literacy through the ESD methodology are:

- It can easily combine formal (schools) and non-formal learning settings.
- It starts with the learner.
- It links to everyday life practices and habits.

RESPONSIBLE CITIZENSHIP

As an individual, what can I do to reduce marine litter?



Minimise the consumption in order to minimise the waste



Reuse and recycle products



Be responsible for your disposal and remember "land and sea are connected"



Avoid single-use disposable cups, plates and utensils



Avoid the use of plastic bags



Refuse to buy items with excess packaging



Use items made from recycled material



Use clothes made by natural fibres



Outdoors, take the trash with you



Support environmental initiatives and encourage others to take action

- It can be delivered via many means of engagement (kinetic games, hands-on materials, citizen science, field-trips, story-telling, etc.).
- It can cultivate a strong emotional connection to the sea.
- It enables learners to be active in finding solutions.
- It is linked not only to knowledge but to attitudes and behavioral change. Yet, achieving behavioral change (going from "knowing" to "doing") is difficult and remains a challenge for any ESD educator.

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Further information:

http://mio-ecsde.org/

www.medies.net and www.marlisco.eu

Zero Waste ACT® CASE V. HOUSING



A Lebanese initiative to address Lebanon's solid waste disposal problem through developing awareness of the massive environmental consequences and promoting an integrated waste management hierarchy emphasizing the three conventional R's - Reduce, Reuse, and Recycle - but also introducing another set of R's; Respect, Responsibility, and Recognition.

In 2010, Contra International Waste Management Team developed the Zero Waste ACT® (ZWA) in collaboration with Lebanese institutions to address the country's solid waste disposal dilemma and decrease their demand for natural resources.

The country -especially in the capital, Beiruthas been consumed by a waste crisis that began in 2015. According to Sammy Kayed, Development Manager at the Nature Conservation Centre of the American University of Beirut (AUB), Lebanon's waste problem is not confined to household trash; it includes sewage, industrial, agricultural and medical waste. Just 8% of water that has run off from households and factories is treated before it is either open-dumped or pumped into the Mediterranean Sea.

Zero Waste ACT® is Contra International's ambitious initiative to minimize solid waste haphazard disposal and divert the waste stream away from landfills. The initiative aims at developing awareness of the massive environmental consequences in the sanitary system through the implementation of a comprehensive set of actions designed to address Lebanon's solid waste disposal dilemma and lessen the demand for natural resources.

The project was formed to act locally and offer an innovative service to schools and institutions to promote recycling and waste management through daily actions than require minimal effort. In the medium term, the aim is to expand to all schools, all families and communities; to open up minds to the possibility of a cleaner planet and to enhance



Beirut, Lebanon

the idea that caring and making a difference in the lives of generations to come is what matters most.

By becoming members of Zero Waste ACT®, schools and institutions benefit from a country-wide recognition program, receive awards and donations in conjunction with their needs and are introduced to alternative sources for their supply channels..

The initiative empowers students from schools, allowing them to practice the principles learned in the classroom regarding their daily waste, By doing so, the students **become ACTive and responsible citizens** of their communities. The perception that garbage is not an individual's "problem" can be changed when everyone realizes they can make a significant contribution through managing resources.

ZWA's targets vary from private schools and universities, to the corporate sector, as well as municipalities. This approach builds upon the importance and interrelationship of all members of society while encouraging the development of new waste management technologies.



ACTIONS

• Country-wide recognition program

The initiative recognises the efforts of its members in waste management and publish a monthly ranking of those entities that have undertaken actions to improve recycling in schools, the workplace and public spaces.

Reward Catalogue

The catalogue includes green technologies (LED bulbs, solar A/C, solar water heaters, etc), school supplies (library materials, consumables, classroom furniture) and large bins for recycling.

Elaboration of School Manuals

Within the project, several manuals have been designed to support the recycling activities at schools. These are available in English, French and Arabic.

• Eco Challenge & ART Waste Contest

Students across Lebanon participated in games and activities while learning about the environment and the importance of RE-cycling and RE-using.

Recycled Content Tool for calculating greenhouse gas emissions and energy consumption

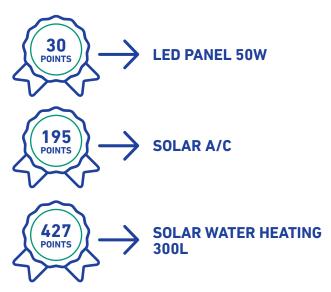
Different tools have been elaborated to estimate the carbon footprint according to different waste management scenarios.

According to the promotor, there is not a true definitive waste management guide, but the initiative helps communities conserve natural resources, reduce waste handling costs, and increase their revenues through proper waste management.



Points for recycling 1 ton of each material

REWARD CATALOGUE:



55 PARTICIPATING SCHOOLS

81 PARTICIPATING COMPANIES

2.5 MILLION CITIZIENS (students, teachers, residents, refugees)

Example and impact

Thanks to this initiative, waste management is included as part of a students' lifestyle rather than being an obligation.

Further information:



Besançon, an exemplary city that demonstrates that involving citizens in the waste management process can play a determining/pivotal role to drive circular economy meanwhile keeps the costs low.

In 2008, Besançon and its surrounding municipalities decided to start moving away from incineration to a **programme based on an extensive use of decentralized composting and pay-as-you-throw fees applied to waste, aiming at achieving zero waste.**

Under this project, a pay-as-you-throw (PAYT) scheme was put in place and most community composting sites were installed, which served to create a new dynamic around waste prevention. The scheme is based on the principle by which citizens pay according to how much residual waste they generate. The PAYT scheme has served to promote an increase of separate collection of waste, and especially to push citizens to start composting their food scraps, thus reducing the waste they produce and, consequently, the fees they pay.

SYBERT, the joint public authority in charge of waste treatment, has taken more than 40 different types of measures, ranging from awareness raising, to the free provision of reusable plastic cups for parties and events with a deposit, or the promotion of food waste reduction practices such as feeding chickens with food scraps. Single-use diapers are another important source of waste that is meant to be prevented through the promotion of washable cloth diapers for children. On top of raising awareness, SYBERT freely lends test kits for one month to parents willing to give them a try.

SYBERT carries out an important educational and environmental campaign to involve citizens in the waste management process in the city of Besançon.

SYBERT follows the Local Prevention Program which aims at reducing the waste production



Besaçon, France

of the local population through practical tools and awareness actions in the community. The awareness actions target citizens but also professionals on the prevention and management of waste. The initiative also seeks to reduce food waste, promote the use of repair objects and loan systems for reusable utensils in to make Besançon an exemplary eco-city.

Additionally, Besançon has worked with households on promoting a Zero Waste lifestyle. SYBERT launched the "Almost Perfect Households" campaign, inviting 20 different households to present their way of reducing waste at home. The idea was to showcase best practices in Besançon that can resonate with their neighbours.



EDUCATIONAL ACTIVITIES:

- ✓ Free training in ecological management of green waste.
- ✓ Free training in composting and composters.
- ✓ Workshops on Zero Waste in schools, companies and administrations.
- Open days at the recycling centres and waste treatment plants.
- ✓ Elaboration of guides on good practices to promote recycling and home composting.

Densely inhabited urban areas require a different approach, due to the limited amount of people with space to practice home-composting. Small-scale community composting sites turned out to be a very effective solution to divert bio-waste from residuals, while creating new social **dynamics.** The experiences have also resulted in improved social contacts among neighbours and increased the sense of ownership of projects. Once the composting sites are installed, an informative social event is organized in the neighbourhood, to bring people together and explain to them how the system works. Those willing to participate receive a kitchen vented bin. In some cases, people have decided to take a step further and make a small collective garden next to the community composter.

Similar to other cities in France and throughout Europe, the citizens of Besançon were not always sure about how to sort their waste. Whilst glass and paper were already at high levels of separate collection, light weight packaging was especially low performing. To tackle this, SYBERT changed the sorting instructions for citizens and the means of communication to clarify their doubts related to recycling.



2009-2015

- Pay-as-you-throw scheme
- Awareness raising campaign
- Free kits of sustainable products

2015-2021

- Actions to increase the participation of the community
- Improve communication tools to teach recycling
- Implementing new treatment plants and bio-waste solutions

Further information:

https://www.sybert.fr/ https://www.oneplanetnetwork.org/sites/ default/files/cs9-besancon-en.pdf





An environmental-friendly transport service that reduces the emissions while increase ecological awareness among schoolchildren.

In 2003, the Transporti Publicci Parma (TEP) in collaboration with the Department for Education and Social Policies and the Department of Mobility in the municipality of Parma created the school service "Happy Bus". The project is a scholastic service focused on environmentalism which facilitates the transportation of elementary and middle school students between their homes and their schools. Lessons on environmental issues are held and educational films are shown during the drive to and from school.

The initiative has three main objectives. First, the service reduces local during rush hours due to the decrease in number of cars on the road, therefore improving the quality of the air as a consequence. Second, a high quality, ecological and safe school transport service is offered to residents, granting the opportunity to the students of public and private, elementary and middle schools to take part of the initiative. In addition, the students receive an extracurricular education on environmental issues and sustainable development.



Parma, Italy

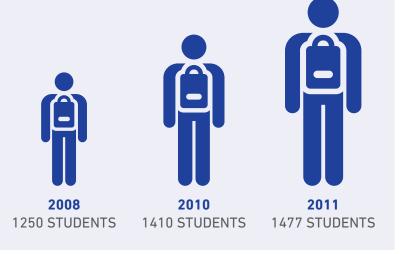
Since 2008, the initiative has been recognised on a national level as an innovative pilot scheme. It is indeed a high quality service, composed of a fleet of 45 ecological methane buses equipped with projection technologies for educational films. In fact, on the way to school, lessons on environmental issues are given by qualified pedagogy students and teachers, who join the schoolchildren during the journey.

- ✓ Less traffic and better air quality
- ✓ Safe school transport service
- Environmental education taught during journey



The number of students enjoying the use of this "door-to-door" service keeps increasing.

The success of the initiative is confirmed in fact by number of users since the beginning of the project, being the 90% of annually requests being accept by TEP.



Several countries in Europe such as France, the UK, Norway, Sweden, Poland and Italy have decided to switch to biogas buses to reduce the air pollution in the cities. Biogas is gas obtained from biomass, which is colleted from installations for processing animal and plant waste or waste from sewage treatment plants and landfills. Biogas can be used as fuel for cooking or heating but also fuel engines. Some studies show that CO2 emissions in buses fuelled by natural gas (e.g. methane buses) are from 68% to 82% lower compared to conventional fossil fuels, depending on the scenario³.

The number of students enjoying the use of this "door-to-door" transport service keeps increasing. The success of the initiative is represented by the number of users since the beginning of the project, whereas 90% of annual requests are accepted by TEP.

This increase in applications received by TEP shows how the initial resistance and parental distrust towards this alternative transport project for their children has been overcome. The bus service guarantees a seat for everyone and, on the other hand, provides information

and environmental education through using videos as a way to sensitize students towards ecological and environmental issues delivered by informed and experience personnel.

In summary, families increasingly rely on the "Happy Bus", which has convinced them of the importance of the project and left them pleased with the service provided. This aspect confirms and points to an increase in environmental awareness of society and indicates a changed attitude towards innovative projects that concern with ecologically sustainable mobility.



Further information:

http://www.tep.pr.it/servizi_speciali/happy/happy_iscrizioni_sono_chiuse_38.aspx

3 Ricardo Energy & Environment, 2016. The role of natural gas and biomethane in the transport sector.

CeroCO2

CASE VIII. HOUSING AND MOBILITY





Calculate your CO2 emissions to identify the most polluting activities and learn how to reduce the environmental impact of your daily routine. Finally, compensate the impact by supporting environmental actions.

The CeroCO2 initiative, promoted by NGOs ECODES and AcciónNatura), was founded in 2005 and proposes specific actions to reduce the impact of regular activities on climate change such as travelling, organising an event or switching on the air conditioner at home. The initiative has a dual goal, first to reduce the environmental impact and then to improve the quality of life in local communities.

Firstly, the project facilitates the calculation of the carbon footprint through an interactive tool. The calculation of the CO2 is the first unavoidable step to be able to draw a quantitatively measurable reduction plan. The tool easily estimates the CO2 emissions from taking a flight, travelling by train or car, making hotel accommodations and electric and utility usage, such as in, heating and air conditioning.

Secondly, this initiative proposes actions to reduce the impact from those specific activities. This is a learning process on how to identify the activities that cause excess pollution and how to reduce their impact. The CeroCO2 initiative elaborates reduction plans adapted to each case by classifying the measures according to their complexity of implementation, cost and potential for reducing the total carbon footprint. The tool helps users to realise that a change in lifestyles is required to reduce carbon footprints.



Barcelona, Spain

Additionally, the project website offers a wide range of ways in which people can reduce their environmental impact. A community of more than 16.000 users share their experiences and recommendations about sustainable lifestyles through the Community Platform of the initiative. The recommendations include tips to minimize the "stand-by" state of home appliances to reduce the electrical consumption, use of saving devices for water taps and energy efficiency measures to cool and heat houses throughout the year.



Environmental projects undertaken in Peru and Nicaragua thanks to the CO2 compensation scheme.



1) Calculate your CO2 emissions













2) Learn how to reduce the CO2



3) Compensate the CO2, turning your impact into environmental action







Finally, the project encourages users to compensate the CO2 emissions, turning their impact into an action that promotes environmental projects. The compensation of CO2eg emissions is based on the voluntary and -financial contribution proportional to the tons of CO2eq emitted, and which have not yet been reduced, over a period of time. This economic contribution goes to projects that reduce or absorb CO2eq emissions, such as in renewable energy, energy efficiency, waste treatment, reforestation, conservation and prevention of deforestation or improvement of agricultural practices. These projects must help to mitigate and adapt to climate change and generate social benefits for local communities, through job creation, improvements in education,

health and safety as well as protect, conserve and improve biodiversity. More than 250 entities and 1,200 individual members have participated in the compensation programme.

Thanks to this initiative, more than 300,000 tonnes of CO2eq. have been compensated since 2005, which have has permitted the organizers to carry out projects in Peru, Nicaragua, Guatemala and China.

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Further information: https://www.ceroco2.org

Organic farming for young people with disabilities CASE IX. FOOD





An inclusive project to educate on sustainable farming bringing the community together.

The project was developed with the Eco-Schools programme that is run by Nature Trust – FEE Malta and supported by the Centre for Environmental Education & Research (CEER), of the University of Malta. The Maria Regina College, Dun Manwel Attard Young Adult Education Resource Centre caters for youths with disabilities and gardening classes have always been a regular feature of the school's curriculum. Through the Eco-Schools programme, sixty students were empowered to make suggestions to improve the educational curriculum. Before 2014, the gardening unit was already growing products organically but in 2014, students together with their teachers, opted to continue to develop organic farming and thus encouraging healthier options. The school's efforts were supported by a local organic farmer who taught the students the necessary skills as well as monitored their progress. Furthermore, parents participation was encouraged and formed an essential component of the project.

This initiative was born to address the lack of sustainable agriculture practices and the lack of awareness on sustainable alternatives to food production in Malta. The project aims as well at promoting production of local products to address the environmental and social impacts from importing food products. At the beginning, the project was confined to the school, but then it was launched to include other schools from across the island.



Malta

The gardening lessons are included as part of the Eco-Schools programme. The Gardening Committee teamed up with organic farmers to grow herbs, fruits and crops (such as tomatoes, eggplants, cabbage, lettuce, eggs, carob pods, lemons, oranges). These activities are carried out by youths with disabilities in collaboration with teachers, parents and the local community.







The project also led to the school being opened for the community and offering:

- hands-on activities related to organic farming
- cooking sessions using organic produce
- selling products grown in the school

The project initially focused on farming practices, but it later developed to include other aspects of responsible consumption. Moreover, different subjects such as Independent Living Skills (ILS), Work Exposure, Personal Social Development (PSD) and Science also stressed the importance of sustainable consumption and sustainable lifestyles during the lessons.

This successful initiative has shown beneficial outputs for the community and the educational centres. Apart from providing educational lessons on sustainable farming and food consumption, the project has helped to

develop entrepreneurship skills among the students and moreover, it promotes inclusion as people with disability feel as active contributors in the society. Since the beginning, it has been seen as a multiplier effect and the initiative has been implemented on other schools.

"I am of the idea that the project in itself was unique! It promoted organic farming, healthy living and healthy eating, was an example of inclusive collaboration and most of all, it was an enjoyable learning experience for all involved!"

Nick Agius MRC, Head of School

Contact:

Paul J Pace, Centre for Environmental Education & Research (CEER) University of Malta (paul.j.pace@um.edu.mt)

Further information:

http://www.medies.net/_uploaded_files/crete%202019/ses_4_pace%20university_malta.pdf

Sustainable Lifestyles in the Workplace

CASE X. LEISURE, HOUSING & FOOD







An initiative that promotes sustainable lifestyle in the workplace so the employees adopt good practices in their households and communities as well.

Mawarid Association was founded Marrakesh, Morocco to place environmental sustainability at the heart of public policy and debate. The Mawarid Association in collaboration with the UN Environment Division (UNEP) launched the project Sustainable Lifestyles in the Workplace. The coordinators of the project worked with hotels and riads in Marrakesh to implement actions that promote increased sustainable living and lifestyles. These actions enhanced employee well-being and inspired the workplaces to continue promoting sustainability beyond the project's lifespan. This initiative was replicated in other cities, such as Panama and Bogota, as part of the programme launched by UNEP and the One Planet organisation.

Workplaces are an environment of exchange, learning and work. A greener workplace can help lighten its ecological footprint, enhance environmental awareness with the added benefit of creating a healthier and more productive workforce.

Sustainability policies in the workplace can inspire employees to go an extra mile by adopting similar practices in their households and communities.

The promoters of the project invited the main actors from the hotel sector to learn more about the initiative through an informative session. The Mawarid Association took advance of this meeting to hear the aspirations, interest and needs from the hotels' managers. A number of hotels that are environmentally-committed were eager to be part of the project, including the Hivernage Hotel & Spa, Le Méridien N'fis, Terres Des Etoiles, the Pearl Hotel Marrakech and the Riad Le Rihani. For each participant, the association in collaboration with the managers of the hotels, agreed upon a list of priority



Morocco

actions to be rtaken according to their own and specific needs. The Mawarid Association allocated a tutor to visit the hotels and evaluate the sustainability at the workplace, through face-to-face meetings with the hotel's staff and surveys. Throughout the duration of the project, the association followed up on the development of the actions and assessed the level of commitment from the participants.

Although there were some difficulties to overcome (lack of interest on the topic, lack of commitment, difficulties in engaging hotels, etc...), the initiative had a positive impact on the participants and clearly serves as an example for other countries. After the project, the coordinators highlighted the importance of designing a sustainable plan for each workplace in collaboration with the hotel managers which includes specific actions and next steps.

"The Green Team Building activity continues to be a success because participants learn about Sustainable Consumption and how to protect the environment in a fun way outside their workplace"

Yassine Zegzouti, Association Mawarid

All the actions listed below **resulted in a significant reduction amount of CO2 emissions, waste reductions and eye-catching changes of employees' attitudes and consumption habits.** Most importantly, it highlighted the potential for future efforts.

1. Meatless for a Day.

All participant hotels promoted one meat-free day per week or twice per month. This initiative raises awareness of the environmental impacts of meat consumption, and encourages people to reduce these impacts, preserve natural resources and improve their health. Since the employees became more aware of their consumption footprint and figured out how to prepare a tasty, plant-based meal, they developed healthier food habits that made them feel better too. The shift towards less meat helped the workplace expand its suppliers network with local producers.

2.Local and eco suppliers.

Some of the hotels encourage better health and well-being by purchasing their products from environmentally conscious farmers and responsible agricultural co-operatives. In addition, there have been supplementary measures to reduce food waste by using responsible supplier networks.

3. Reusing plastic to create art.

One of the hotels, the L'Hivernage reduces its waste and donate the plastic to artists who refashion it into works of art that are displayed in exhibitions around the globe. While the ultimate goal is to reduce the use of plastics, this initiative to re-purpose waste is a noteworthy creative example of how to upcycle plastic pollution.

4. Improvement of the waste management.

In general, the hotels improved the waste management through the increase of signs and waste separation bins in the rooms, and were able to raise awareness on the importance of waste treatment among employees and guests. This helped the employees feel engaged and contribute to its success while improving the guest experience through sustainable practices.

5. Sustainable power supply.

The environmental policy of the workplace stipulates limiting climate impacts. Hence, the hotels went beyond waste management systems and installed solar panels and LED bulbs as an extra initiative.

6. Training sessions and best practices.

In order to motivate and involve its employees in its environmental protection policy, the hotels organized training sessions on good environmental practices including the preservation of water and energy.

7. Green Guests.

To encourage hotel customers to protect the environment, the workplaces developed a program called "Make a Green Choice". Through this program, the guests get to choose the frequency of cleaning their rooms and linens, granting them the choice to decline the room service for up to 3 consecutive days. Thus, they participate in the protection of the environment by preserving nature and reducing the consumption of laundry products, minimizing the consumption of water and energy, etc.

8. Green competition.

One of the hotels organized a competition for the employee of the month based on sustainability criteria. Throughout the month, the workplace displayed a variety of messages to motivate employees to adopt better sustainable practices in their daily tasks. The employee of the month competition motivated hotel personnel to take into account sustainability in daily aspects of their job. As a consequence, many of them adopted similar habits in their households.







9. Cleaning outdoors activities.

One of the hotels promoted outdoor activities such as responsible jogging, which involves stopping to pick up trash while running. Employees started adopting a routine of picking up trash while practicing daily sports and even began to keep a bag in their pockets for further waste collection.

10. Plasctic free policies.

Another hotel, Les Terres Des Etoiles, has taken considerable efforts to be plastic free. Their waste management system prohibits using disposable plastic bottles, plastic bags, straws, cups and plates. They use long-lasting materials, glass or paper alternatives.

11. Wastewater reuse and composting.

The Terres Des Etoiles hotel reuses their wastewater to irrigate their gardens and fountains. For sustainable sanitation, the hotel also uses dry composting toilets. The hotel's composting materials come also from other sources such as food waste or farming. These composting elements are used later as an organic amendment to improve soil quality.

12. Solid waste reduction.

One of these members decided to raise the awareness concerning the issue of solid waste among employees to try and reduce the total amount generated. To do this, they developed incentives to motivate employees. The most successful was to divide the money saved from waste reduction and then diving that amongst the employees as bonuses.



13. Donation of second-hand clothes.

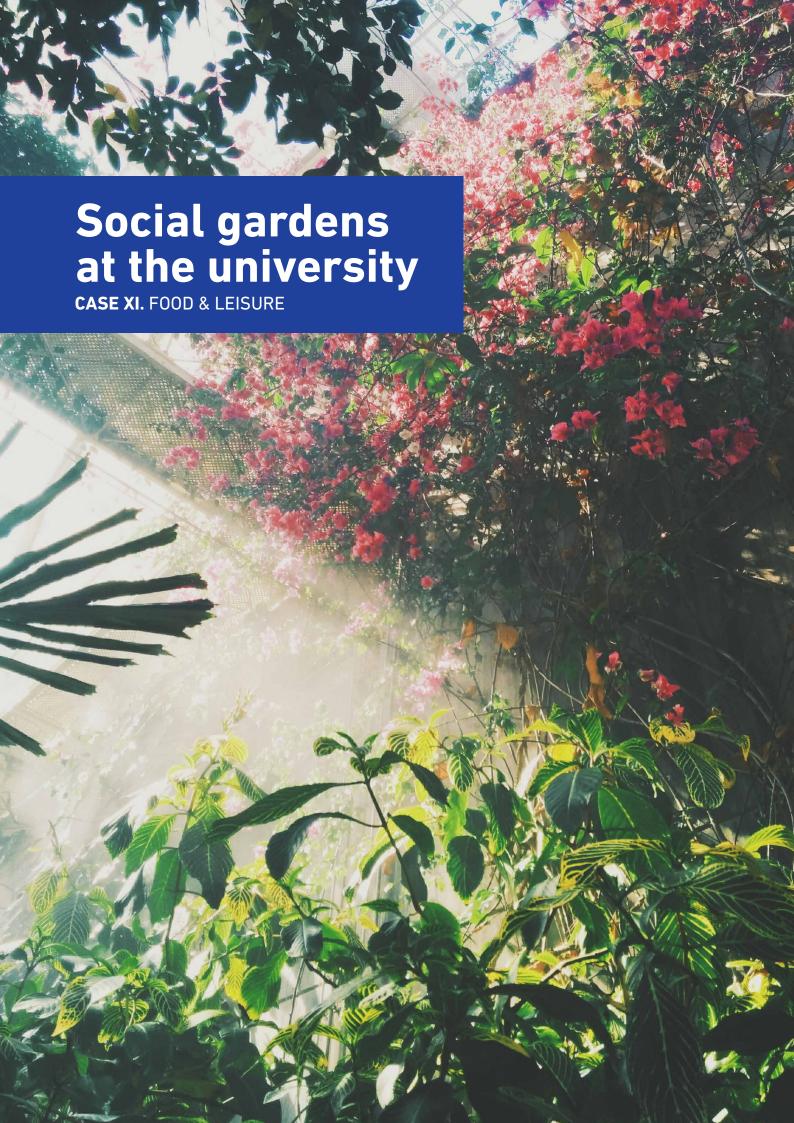
Several hotels organized a collection of the second-hand clothes to donate to charity to reduce waste and spread a swapping and sharing culture amongst employees. The effort helped people rethink throwing away items and also brought the attention from tourists and customers who appreciate being involved in similar social actions.

14. Green team building.

This is one of the most successful activities organised by the Mawarid Foundation. The workshop brings together the employees to carry out a series of fun and educational activities such as fun garbage sorting activity, green tours to learn composting techniques permaculture. activity to gather sustainable suggestions to be implemented in the hotel, etc.

Contact: Yassine Zegzouti, Association Mawarid (asso.mawarid@gmail.com) Further information:

https://www.oneplanetnetwork.org/sites/default/files/20190116_case_studies.pdf







Initiative to promote environmental education for social innovation while improving environmental quality in the cities

The project "Social gardens at the Universitat Rovira i Virgili (URV): Environmental education for social innovation" is a project founded in 2015 by the university community to learn environmental and social aspects. Its synthesis is the result of a social innovation project, in which the knowledge in environmental education and the recovery of social values have been applied jointly. Thus, the approach of this project goes beyond the traditional concept of community garden.

Considering the current issue of excessive transportation of food, the initiative proposes a model based on promoting local production and regaining the role of knowledge and experience from local and small farmers. The possibility of the university providing a garden for the city of Tarragona was a step forward in the recovery of knowledge and respect for the environment, as well as the foundation of social values.

This project proposed the preparation, construction, conditioning and conversion of an area of the Catalunya Campus of the Rovira i Virgili University, which was previously unused, in a space for agrarian social learning. The objective of the action was to develop a social innovation project that would allow the integration of socially vulnerable groups, such as the elderly, people with disabilities, unemployed, etc., with the culture of protection and conservation of the environment, sustainability and respect for nature through environmental education.



Barcelona, Spain

In this sense, the URV, through the promotion of the social garden, not only integrates these minority groups into society but also adapt educational resources to other social realities by promoting social inclusion within the university and diffusing the knowledge on the importance of environmental protection.

Although the project is open to collaborate with any non-profit organization with a social vocation, the initiative has initially targeted the elderly population. The progressive mobility of people from the countryside to the city has led to the loss of knowledge and values linked to the land, so it puts forth a major motivation to recover lost knowledge and re-evaluate the linkage of people with natural resources; In short, to have the wisdom of our grains.



With the objective of developing the project in a viable and effective way, **involving the teaching team has been key** to carrying out the methodology of learning based on social and environmental values. The educational activities have included learning about the architectural design of the garden, the development of a code of behaviour and good practices, the promotion of organic farming, the transformation of urban landscape, nutrition lessons and ways to improve eating habits, and management and maintenance systems for water resources and common spaces.

In short, this initiative aims to contribute to the reflection in practical terms, especially inthe adaptability of the university to meet social demands. It is necessary for the university to face the current social challenges and respond to new and complex human needs, as well as to promote respect for the environment, transfer knowledge and foster the capacity of the university community to contribute to the social and environmental transformation.

More than 50 volunteers have participated in the community garden cultivating plots and developing social activities. In total, the social gardens of the URV have impacted over 347 users through the learning-service.

At this moment, the URV's social gardens initiative is still ongoing in the Bellissens campus of the university in Reus, improving the city environment and transferring the values and benefits from social gardens not only to students but also to citizens.

The URV's social gardens show that it is possible to promote a model of interaction, production and consumption based on enhancing environmental protection and local health through designs of cooperative and collaborative dynamics.

Contact: Susana Borràs, URV (hortsocials@urv.cat)

Further information: http://bonespractiques.acup.cat/ca/casos/metodologies-innovadores/aprenentatge-servei/horts-socials-urv-educacio-ambiental-innovacio-social





GRESSET TO THE STATE OF THE STA

HOLIDAYS FOR A LIVING PLANET



A guided tool to raise awareness among tourist of their potential to contribute to the sustainable development through making responsible choices

This initiative, promoted by the United Nations Environment Programme (UNEP) in collaboration with the French Ministry of Ecology, Sustainable Development and Spatial Planning, is considered as one of the main outputs of the Marrakech Task Force on **Sustainable Tourism.** The Marrakech Task Forces are important and active mechanisms of the Marrakech Process building North-South cooperation and implementing concrete projects at national and regional levels. They are voluntary initiatives led by governments focusing on specific themes of SCP such as: sustainable products, lifestyles, education, building and construction, tourism, public procurement, and cooperation with Africa.

An internet-based campaign, 'Green Passport' aims to raise awareness among tourists of their potential to contribute to sustainable development by making responsible choices. The campaign involves every stage of a holiday, from the choice of a tourism destination, through how to plan the trip, how to get there and move around in the destination, how to relate to the host community and its surroundings ecosystems, up to the choice of souvenirs, the trip back home and subsequent actions. The Green Passport sheds light on how tourists' holiday decisions can make a difference. Through informed choices such as travelling light, tourists have the power to reduce their carbon footprint and contribute to combat climate change.





Thanks to the project, travellers are able to find practical tips to help them reduce their environmental and social footprint while they are on vacations. Tourists will discover that traveling green is not as hard as they imagined.

The green travel tips address the entire holiday cycle from travel planning and packaging to the way back home. For example, the campaign encourages tourists to choose responsible service providers, reduce the consumption of energy while on the road or in their hotel and buy locally made and environmentally friendly souvenir, among other travel recommendations.



Through travel guides, smart phone applications, websites and other activities, the campaign helps tourists minimize their footprints by choosing the least polluting form of transport, finding low-impact accommodation options, improving their energy efficiency at destinations, offsetting the inevitable carbon emissions of their trip, and proving sustainability tips to help improve the livelihood of host communities.

The campaign was widely spread and multiplied by the mass media in all countries where it was launched through different communication channels, such as TV and radio interviews, around 90 news articles, travel blogs and podcasts. Its website has been developed in English, French, Portuguese, German, Spanish and Chinese.

Although the campaign was created in 2008, it can still serve as an example for future projects of sustainable tourism as it provides guidelines to help tourists to make responsible choices. UNEP has continued its efforts on promoting sustainable tourism worldwide for more than a decade. The Green Passport has made an appearance at major events and tourist destinations since its founding. Most recently, it was part of initiatives by the UN Environment to reduce the footprint of the 2014 Football World Cup in Brazil, 2016 Rio Olympic Games, Rio+20 environmental conference, the Paris Conference

on Climate Change and 2010 Football World Cup in South Africa. The Green Passport can be downloaded as an application or used online, and gives a wealth of advice to tourists on how to minimize their environmental impact while in the visiting countries. Beyond responsible tourism tips, the campaign encourages travellers to choose more sustainable practices, such as public transportation and local cultural experiences. Tourists may also recommend establishments engaged in the campaign, using sustainable criteria.

Additionally, some ministries of tourism have elaborated a specific Green Passport for their countries. This is the case of Morocco, where the Moroccan Ministry of Tourism, Michelin and the Moroccan non-profit Association Mawarid for Environment and Energy, have elaborated a map marking out hotels with the Clé Verte (or 'Green Key') environmental label, green restaurants, traditional crafts shops, spas and hammams that use natural local products.

Further information:

http://www.unep.fr/scp/marrakech/taskforces/pdf/UNEP_Green_%20 Passport%20070509.pdf









An initiative to promote sustainable development of the Mediterranean Region, through the lens of our common background and food traditions.

UNIMED, the Mediterranean Universities Union, is an association of 124 Universities from 23 different countries of the Mediterranean basin, funded by regional and European projects. UNIMED's main role is to promote the international dimension of universities acting in different scientific fields and developing research and education in the Euro-Mediterranean area in order to contribute to scientific, cultural, social and economic cooperation.

UNIMED in collaboration with Fondation Maison des Sciences de l'Homme, has recently organised a one-week Summer School on 'Mediterranean Identity: debates on a common destiny' in Licata (Sicily). This Summer School has been organized along the 'nnumari' event, organized by the Sicilian Chef Pino Cuttaia, which gathered international chefs, journalists, economists, fishermen, breeders, farmers, producers, artisans, fishermen, entrepreneurs, artists and communicators.

The purpose of the Summer School was to create a network where experts from different sectors, such as sociology, science, art, journalism or culture, can discuss the sustainable and ethical development of the Mediterranean Region, through the lens of a common cultural background and in particular, common traditions related to food (production, consumption, experiences...), in order to offer a positive paradigm in Euro-Mediterranean relations.



Licata, Italy

The training project addressed students and young researchers of different fields to allow them to share their analyses and point of views on the Mediterranean Sea, while providing them with a common multidisciplinary forum of discussion to find ways that positively impact the future generation's knowledge and awareness about the value of the Mediterranean heritage and resources.

The Summer School was a chance of reflection on the sustainability of the Mediterranean supply chain aiming at developing replicable and shared models of social and environmental development.



UNIMED's vision is to counter the ideas of division and stand for the multiple facets of our Mediterranean origin, by enhancing the different traditions of the countries exposed to the Mediterranean Sea. Therefore, this initiative was conceived to underline the treasures of the Mediterranean region as well as to convey a positive message of the Mediterranean culture, while ensuring that its resources and wealth are taken care of.

Enriching old traditions related to cooking, supporting local economic activities, defending small producers, explaining the local food market dynamics, showing young people the value of their territory are fundamental elements to both foster the economy and enhance the region. Furthermore, it is necessary to promote a more sustainable consumption in economic, environmental and social terms. Encouraging the use of renewable resources, increasing awareness in preserving biodiversity and ecosystems, as well as fighting marine pollution, are essential messages the summer school aims to convey. Finally, the program tackled the topic of nutrition, namely the nutritional value of certain foods, raw ingredients and healthy cooking methods.

A total of 15 students and young researchers from the UNIMED associated universities from

11 different countries with various academic backgrounds enrolled the summer school. The students also had the opportunity to participate in parallel activities where more than 20 chefs from several Mediterranean countries and experts on Sustainable food discussed the topic of the Mediterranean traditions.

In summary, the protection of the sea's sustainability as well as the Mediterranean cultural role cannot neglect considering the development of an ethical awareness on development and consumption, especially for future generations.

"Knowledge, dialogue and sharing is all we need to look at the Mediterranean in a positive way starting by putting ourselves in the shoes of all countries in the Mediterranean"

Marcello Scalisi, UNIMED

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Further information:

http://www.uni-med.net/the-mediterreanidentity-at-the-heart-of-the-first-unimedsummer-school/





Reduction of Plastic Bags Consumption National Initiative

In 2017, the Egyptian Ministry of Environment in partnership with the United Nations and Centre for Environment and Development for the Arab Regions and Europe (CEDARE) launched the Reduction of Plastic Bags Consumption National Initiative. Alongside with the international trend of reducing plastic bags and under the slogan 'NO MORE PLASTIC BAGS', the Ministry- together with its partners play a major role in the mobilization and awareness raising withing the Egyptian community to contribute to reduce the environmental impacts from using single-use plastic bags.

This initiative takes place within the framework SwitchMed Regional of Programme, funded by the European Commission. This green initiative, which is part of the sustainable consumption and production approach, has socio-economic and environmental dimensions. By merging environmental and economic Egypt will be ready to adopt green economy policies.

It is, mandatory to turn such initiatives into policies combined within the state's strategy in order to achieve the target sustainable development.

The initiative has a key mission, to coordinate with large food chains, supermarkets, pharmacies, and clubs to join forces in influencing Egyptian behaviour decreasing the current consumption rate as a start, improving consumers' attitude towards resources, and using an environment-friendly alternative bag via influential awareness campaigns and diverse activities.



Egypt

The Ministry of Environment, CEDARE and UN Environment cooperate with the 6 main supermarket chains in Egypt namely, Metro, Carrefour, HyperOne, Ragab Sons, Kheir Zaman, Fathalla Market & Al Raya Market. Driven by sheer environmental and social responsibility, 72 branches in Cairo and one in Alexandria so far have participated actively in the initiative.

Among the different actions taken, the Ministry of Environment has distributed at least 4500 environmentally-friendly bags to replace traditional plastic ones.

The project at hand, calls for introducing a mandatory levy scheme as an economic instrument, which will be additionally imposed on the final price of the plastic bags. The incurred monetary gain from this proposed levy can be used to support creativity and innovation to find local alternatives to plastic bags and support entrepreneurs.



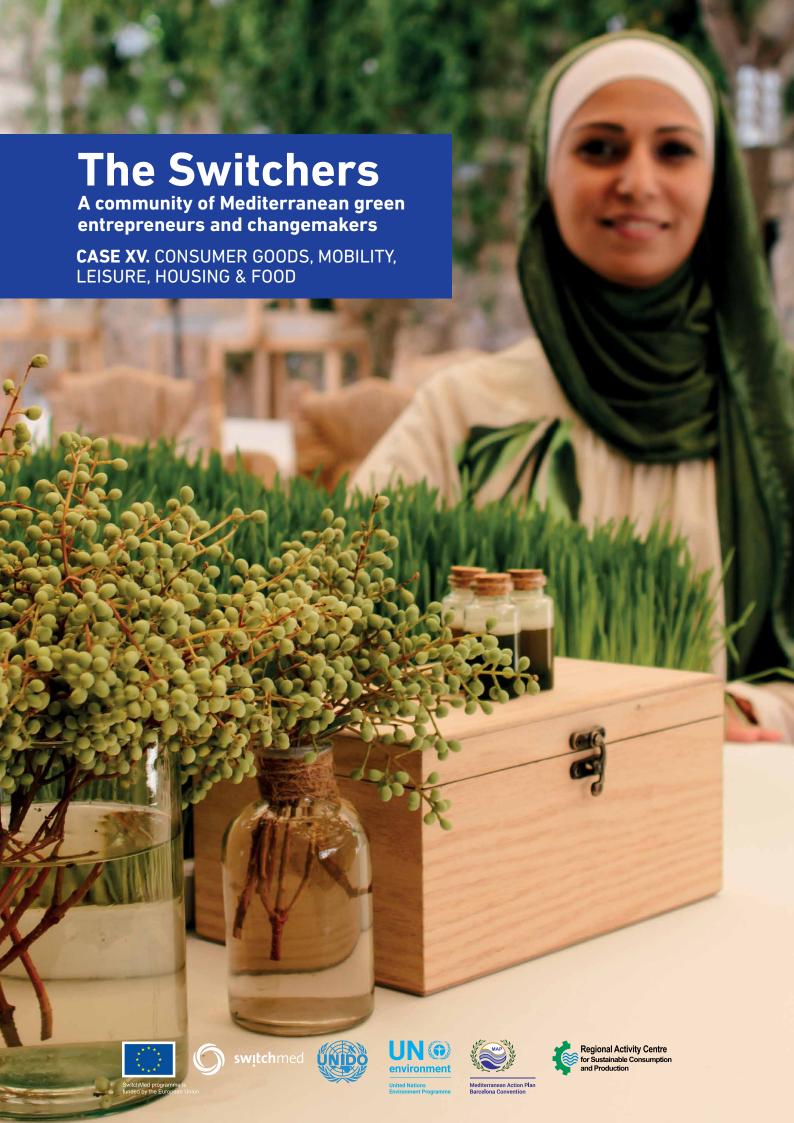
The campaign, moreover, targets women within the community groups as they use bags on daily basis and they also play a pivotal role as a generational educator who can convey the risks of using non-recyclable plastic bags to their families, friends and greater community.



This unique public-private sector collaboration aims to reduce the annual consumption of 12 billion non-degradable plastic bags in Egypt, which destructively affects people's health, the economy and the environment at large. These plastic bags are littering Egyptian streets and waterways including the Nile, the Mediterranean Sea, and the Red Sea. The coordinators of the initiative point out that society need to know that non-degradable plastic bags are a real threat to human health, fish & marine life, coral reefs, diving and environmental tourism, water drains, desert animals and more.

Further information:

https://www.switchmed.eu/en/news/news-1/egyptian-minister-of-environment-propagates-biodegradable-plastic-bags-in-7-hypermarket-chains











Initiative to scale-up social and eco innovations in the Mediterranean

The Switchers is a community of inspiring green entrepreneurs and changemakers in the Mediterranean region. Switchers are individuals, enterprises or civil society implementing organisations innovative ecological and social solutions that contribute to a switch to sustainable and fair consumption and production models. They are active in a variety of fields, including organic farming, sustainable tourism, waste management, organic textile, recycling of electronic waste, sustainable building, organic cosmetics production, among others. Most importantly, the Switchers is a community with a voice and a meeting place for people in the region who are passionate about shaping their environment towards a more sustainable future.

"Changing consumption habits social process that requires education and activism by consumer associations, environmental movements and government authorities"

El bouhmadi Latifa. AESVT Morocco





The almost 400 Switchers stories are shining examples of how circular economy approaches can lead to business opportunities and also drive innovation that benefits people and the environment.

Together, these important economic actors are making significant progress towards one of the region's key sustainable development objectives: to accelerate the shift to more sustainable modes of consumption and production. In doing so, they are showing how economic growth can also lead to protection of the Mediterranean region and its precious, limited natural resources.

SwitchMed is an initiative that supports and connects stakeholders to scale-up Sustainable Consumption and Production (SCP) in the Southern Mediterranean Region through eco and social innovations. It aims at achieving productive, circular and sharing economies in the Mediterranean by changing the way goods and services are consumed. SwitchMed targets stakeholders such as policy-makers, start-ups and entrepreneurs, civil society organisations, industry service providers and impact investors, in order to to speed up the shift to sustainable consumption and production patterns.

COUNTRY: Morocco

STAKEHOLDERS: Civil Society Organisations

ACTION:

The Association of Teachers of Life Sciences and Earth of Morocco is a non-profit association, local partner of SwitchMed's 'Civil Society' programme in Morocco. Created in 1994, it consists of a network of 18 Environmental Education Centers that aims to contribute to the building of a modern society and solidarity in accordance with the principles and values of sustainable development. The organisation seeks to **reduce the lack of information from the consumer on environmentally friendly products and the dangers of overexploiting natural resources**. AESVT Morocco organises a range of activities including **environmental education**: training club leaders; organising regional events; developing and promoting interactive exhibitions on water, climate change, solid waste, biodiversity; organising annual national meetings on national or regional environmental problems; biodiversity protection projects; development of teaching resources, etc.

COUNTRY: Tunisia

STAKEHOLDERS: Policy Makers

ACTION:

Dar Zaghouan is the first charming farm and **ecological holiday accommodation** established in 2006. This innovative initiative seeks to put the concept of the circular economy for efficient management of energy, water and waste into practice, in a bid to **raise awareness among visitors and regional residents and educate them environmentally**. Since 2016, the SwitchMed programme has been supporting the promotor's efforts with a technical study on the efficiency of resources in his establishment, and by strengthening his international reach through international ecotourism certification. This initiative contributes towards the **development of the sustainable consumption and production** national action plan for Tunisia, focused on **two priority sectors: food and tourism**.

COUNTRY: Egypt

STAKEHOLDERS: Start-ups & Entrepreneurs

ACTION:

The Egypt National Cleaner Production Centre (ENCPC) is a key organization that promotes green technologies transfer and innovation to the Egyptian Industry under the SwitchMed programme. The centre acts as a vehicle for promoting green technologies transfer and innovation for the Egyptian Industry. Apart from the main role of ENCPC, to provide technical assistance for technology transfer, ENCPC has been involved in many initiatives to promote environmental awareness in Egypt. One of the most important initiatives is promoting solar heating technologies to the Egyptian industry. This is done through awareness raising sessions in different industrial zones to promote the idea as well as to train the personnel who will work in this field.









COUNTRY: Lebanon

STAKEHOLDERS: Policy Makers

ACTION:

Lebanon is a country that has already devoted efforts and expertise in the elaboration of comprehensive a National Action Plan on Sustainable Consumption and Production (SCP) to contribute to sustainable development. In order to assist the implementation of this action plan, the Ministry of Environment and Industry and SwitchMed have launched a joint initiative to reduce industrial pollution in targeted industrial enterprises and to strengthen the monitoring and enforcement capabilities of the Ministry of Environment. The Lebanon Environmental Pollution Abatement Project will set up a mechanism for financing the abatement of industrial pollution by offering concessional loans at near zero interest rates. This will help public and private enterprises to bring air emissions, effluent discharges, and industrial waste generation towards compliance with national environmental standards in a cost-effective manner.

COUNTRY: Palestine

STAKEHOLDERS: Policy Makers

ACTION:

Palestine is facilitating the shift towards sustainable lifestyles by supporting and enabling the creation of a new vision for sustainable development. The government, with the support of SwitchMed, has implemented institutional settings and the regulatory framework as well as economic and informative instruments. Some examples of these practices are the establishment of environmental awareness and education and sustainable development authorities and departments; the design and implementation of related laws and policies; the application of economic instruments such the "polluter pays principle"; the deployment of environmental awareness campaigns; the integration of environmental perspective into educational curricula and the green loans initiative promoted by the Bank of Palestine to farmers and households to encourage the use of green technologies.

COUNTRY: Jordan

STAKEHOLDERS: Start-ups & Entrepreneurs

A local SwitchMed partner, the Business Development Center (BDC) is dedicated to the acceleration of economic growth in Jordan and the region through its projects and initiatives assisting SMEs, entrepreneurship and innovation, youth, and women. BDC has just successfully provided the "training of the trainers" workshop week to give the opportunity to the green start-ups to present their innovative products and services with key stakeholders across the governorates. Additionally, BDC with the support of the Ministry of Education and Ministry of Higher Education and Scientific Research, has given entrepreneurial fundamentals to 120 teachers and instructors to train them about green issues to vocational school and community college students in Jordan.

COUNTRY: Israel

STAKEHOLDERS: Policy Makers

ACTION:

As part of its Plan on Sustainable Consumption and Production, Israel is building a Knowledge Centre on Green Growth to promote sustainable production. The aim of the Centre is to bring best environmental practices and eco-innovation to industry in line with regulatory requirements. The centre will assist industrial plants and businesses to comply with green licensing requirements, create, compile and disseminate knowledge and tools on pollution prevention at source and environmental efficiency, facilitate professional networking among stakeholders, and it will assist in recruiting the necessary funding for green growth initiatives.

COUNTRY: Algeria

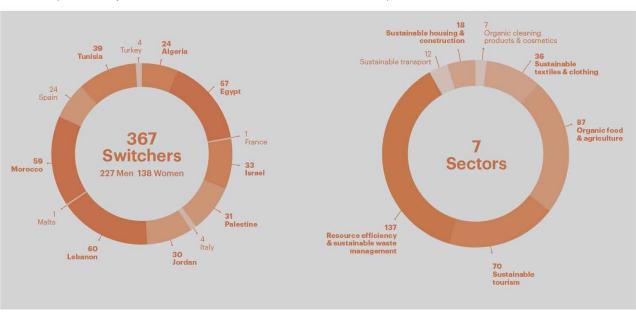
STAKEHOLDERS: Civil Society Organisations

ACTION:

The Mediterranean Sustainable Development Foundation, the local partner in Algeria of the SwitchMed Civil Society programme was created in 2007 to implement every possible action to **promote sustainable development and public awareness**. It is a cultural centre and a forum for discussion open to everyone. The foundation carries out training and educational activities with children and young people on responsible management of the earth's resources through workshops in the spring and summer, the production and distribution of a calendar of ecological gestures, replanting trees campaign, etc. Additionally, the foundation with the support of SwitchMed organises a workshop to improve the sustainable consumption and production projects of organisations in civil society.

Switchers per country:

Switchers per sector:

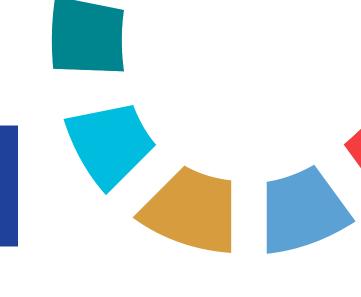


Contact:

Burcu Tuncer, SCP/RAC (btuncer@scprac.org)

Further information: https://www.theswitchers.eu/en/ and https://www.switchmed.eu/en

Close the Loop! CASE XVI. CONSUMER GOODS, MOBILITY, LEISURE, HOUSING & FOOD









Implementing SDG12 Successfully: Online Course on Tools and Methods

In 2005. the Centre on Sustainable Consumption and Production (CSCP) emerged from a collaboration between the United Nations Environment Program (UNEP) and the Wuppertal Institute for Climate, Environment and Energy. The CSCP is an international nonprofit organisation whose focus is the promotion of sustainable patterns of consumption and production, along the following areas of expertise: Products & Services, Cities & Infrastructure, Policy, Lifestyles & Behaviour, and Business & Entrepreneurship.

Close the loop!, an interactive online course on responsible consumption and production, was created and delivered by the CSCP in collaboration with the United Nations System Staff College (UNSSC) Knowledge Centre for Sustainable Development. It was launched in 2017 addressing the need to better understand how the SDG12 could be implemented in a systemic manner in all levels, from individual households to entire industries.

It aims at strengthening the knowledge about SDG 12 and home practical skills for both participants of the SDG foundational course, as well as interested practitioners.

Over the course of six weeks, participants learned to identify the key areas of SCP and their relevance to sustainable development, analysed practices that are relevant for action planning, embedded sustainable lifestyles and consumption patterns into the overall 2030 agenda.



The live webinar sessions with experts from different fields and sectors, enabled the participants to learn about different tools and indicators for SCP, helping them to develop concrete actions towards meeting SDG 12.

The course supported the individual participant in their professional and personal SCP activities. By presenting cases from different stakeholder groups, the course showed how sustainable consumption is an opportunity to live in more harmony with the environment and other people regardless of socio-economic conditions or levels of industrialization.

The course welcomed 14 participants with different backgrounds and from 13 different countries, Mexico being the nationality that was most present. Participants from governmental agencies, UN entities, private sector, multilateral donor organizations, universities and independent consultancy joined the first edition of the training course.











Besides number knowledgeable of practitioners sharing their experience and insights, the course participants took in extensive knowledge application to real-life and training scenarios, as well as collaborative group work with peers. Gamification elements or 'serious fun' were designed to enhance experiential learning processes.

In summary, the course invites to rethink production processes, economic and business models, it allows participants to think about circularity from the perspective of the users, to ask questions and co-create solutions with and for businesses, policy makers, members of the civil society and citizens in general.

One of the advantages of this course, is that it opens the door to many other topics, such as practice-oriented lifestyle changes and corporate social innovation at the same time that can serve as springboard to other topics related to the SDGs.

Thanks to the success of the first training course, efforts are being made to launch an updated edition of the course in 2020. In fact, the alumni suggested the need to have a tailored course on organization's needs, e.g. how SCP could be implemented and supported for a specific company, industry o workplace.

"This course is just the beginning of a larger conversation that needs to take place at all levels regarding sustainable consumption and production"

Georgina Guillen-Hanson, SCP Centre

By the end of the course, students will be able to:

- ✓ Identify the key areas of SCP and their relevance for sustainable development.
- ✓ Analyse production and consumption practices that offer relevant insights for action planning.
- ✓ Understand the relevance of sustainable business models and sustainable lifestyles for the overall 2030 Agenda.
- ✓ Be aware of different tools and indicators towards SCP.
- Relate concrete actions to the targets of SDG 12.
- professional (and potentially personal) activities to the contents of this course.

Contact: Ginnie Guillen-Hanson. SCP Centre (ginnie.guillen@scp-centre.org)

Further information:

https://www.scp-centre.org/wp-content/ uploads/2017/05/UNSSC_Course_Flyer_ new2.pdf



Recommendations and Tools

A joint effort in Education for Sustainable Consumption, Behaviour and Lifestyles

At the Mediterranean level, the efforts from the regional and international governance institutions to promote Education Sustainable Consumption, Behaviour and Lifestyles are materialised through elaboration of strategies and actions plans such as the Mediterranean Strategy Development (MSSD), Sustainable Mediterranean Strategy on Education for Sustainable Development (MSESD) and the Regional Plan on Sustainable Consumption and Production in the Mediterranean. The implementation of these strategies should offer a solution to the lack of policy coherence and regulatory framework with a proper mix of policy instruments.

Institutions like the UfM, as well as SCP/RAC and MIO-ESCDE, play a key role in the implementation of such plans as they can provide public institutions and policy-makers with the appropriate skills, capacity building and technical assistance to empowered national initiatives. In other words, these institutions define the roadmap to implement such strategies, ensuring the coordination among countries for the delivery of regional actions.

The **national authorities** are responsible for effecting the proposed actions at the national and local levels, including the set-up of enabling conditions to achieve the operational objectives of the plans, along with policy coherence and specific measures to promote sustainable development initiatives. Governments should set the regulatory institutional framework that incentivises

the shift to sustainable consumption and production, proving the financial, technologies instruments and institutional support required. The implementation of policies will be successful and effective only when there is an active involvement of relevant stakeholders and policy-makers from all relevant ministries (planning, environment, industry, trade, economy, education, labour, social affairs), as they must ensure to pull the actions plans in the same direction.

While the governments are the 'facilitators' of the national framework to promote education for sustainable consumption, the **local** administrations are the 'executors' and thus, are in charge of ensuring the implementation of the strategies and making the necessary adaptations. On the other hand, civil Society, including unions, NGOs, citizens-led initiatives, social economy associations and consumers groups represent an added value to the local administrations not only in mainstreaming sustainable consumption habits but also in providing non-formal education.

Schools, academia and educational Institutions have clearly the major role in educating on sustainable consumption and lifestyles at all levels, including formal education and beyond. Motivated educators with environmental and sustainability skills are the key to transfer good habits and lifestyles to the future generations.

Recommendations for a responsible society

FOOD



Reduce food waste by better planning your meals.



Choose low-footprint diets, incorporating organic and seasonal products.



Check ingredient labels to identify the origin of foods and its impact on the food chain.



Reduce your consumption of meat and dairies. Increase your consumption of vegetables and fruits. For example, take part of initiatives and challenges such as 'Meatless Mondays'.



Avoid excessive packaging and processed foods as much as possible.



Limit purchases to your local grocery store



Refill and reuse your bottles and containers, refuse single-use plastic, such as plastic straws



HOUSING



Switch to greener energy options from renewable energy suppliers.



Implement a 3R plan: Reduce (consume less and more efficiently), Reuse (take advantage of second-hand bargains) and Recycle (at home, in the workplace and everywhere).



Save energy, set your air conditioner between 24-26°C, as recommended by the Spanish Users and Consumers Organization (OCU).



Be efficient at home: use energy-efficient light bulbs, turn off lights and unplug devices when you are finished using them.



Control water usage in the bathroom by limiting showers to five minutes.



Take part of green initiatives such as the 'Earth Hour'.

MOBILITY



Shift transportation modes to increase the number of trips by walking, cycling and using public transport.



Share your car in your daily commutes, e.g. share the car when driving to metropolitan areas or to your workplace.



Celebrate local initiatives such as international Car-Free Day or World Bicycle Day.



Find alternatives to long-distance travels by choosing train travel over airplanes whenever possible, using virtual conference systems for meetings rather than face-to-face meetings, etc.



Promote work from home one day per week to reduce carbon footprints and increased productivity.

CONSUMER GOODS



Increase the amount of shared, reused and repaired goods in your community (especially among friends, work colleagues, and neighbours).



Aim for a zero-waste approach in your daily life. For example, limiting single-use items (especially plastics) such as disposable cups, using rented plates for special events, paper-less strategies at work and in schools, etc.



Swap your clothes or donate to a second-hand shops or charity organisations.



Take part of initiatives that reduce fast fashion or excessive consumption such as the 'Buy Nothing Day'.



Choose products recognised with ecological labels and certification schemes that indicate the products are been produced more sustainably.



Bring your own shopping and grocery bags.

LEISURE



Take part in outdoors environmental activities such as beach clean-ups, tree planting or gardening.



When planning your holidays, give preference to destinations that have demonstrated responsible practices (in areas such as human rights, environmental conservation records, commitment to peace, etc.).



On vacation, choose an eco-tour operator and bear in mind that some destinations have local restrictions on the use of natural resources such as water and energy. Your hot bath could mean no water for the local community!



On vacation, travelling light will reduce your carbon footprint by a surprisingly large amount. Reducing your luggage by 15kg could save between 100-200kg of CO2 emissions on a return flight from London, England to Tenerife, Spain. Also, avoid the use of 4x4 vehicles, aircrafts and helicopters when possible.



Top eco-friendly apps to help you to live a greener life

• **SDGs IN ACTION:** Learn about the 17 Sustainable Development Goals (SDG), get news on your favourite goals, find out what you can do to achieve them, create your own events and invite others to join you in sustainable actions and events.

https://sdgsinaction.com/

• **TOO GOOD TO GO:** Initiative that seeks to reduce wasted produce at restaurants and shops. The app notifies the clients/users when food is about to be thrown away (due to it has not been sold or due to expiration dates), and for a reduced price, the app users can collect the items.

https://toogoodtogo.es/es

• **BLABLACAR, CARPOOLWORLD:** Apps to share private cars for traveling or work commuting which reduce the individual use of cars. By sharing the commute, drivers and passengers alike reduce traffic, emissions as well the cost of the trip.

https://www.blablacar.es/ https://www.carpoolworld.com/

- **SNAPPCAR:** Rent a car in the city or lend your own car. SnappCar seeks to reduce the number of cars in European cities by proving a platform for renting and sharing private cars to users. https://www.snappcar.de/
- **GOOD GUIDE:** App that provides consumers with product information to help them make sustainable choices, including environmental criteria of production.

https://www.goodguide.com/

• **OROECO:** Automatically track your climate impact with this carbon footprint calculator. See how every part of your life connects to global warming- from driving and flying, to your eating, shopping, and home energy efficiency choices.

https://www.oroeco.com/

• **OLIO:** Connecting neighbours amongst themselves and with local businesses so surplus food can be shared and not thrown away. This could be food nearing its sell-by date in local stores, spare home-grown vegetables, bread from your local bakery, or the groceries in your fridge when you leave for work or vacation.

https://olioex.com/

• **CAR2GO, MIMOTO:** Short-term rental of 100% electric cars and motorcycles in the main European cities and metropolises.

https://www.car2go.com/

https://mimoto.it/ https://www.zencar.eu

• **BIKE MAP:** A useful app, not only for cycling enthusiasts, but for anyone who considers taking care of the environment by going to work by bicycle or enjoying a cycling excursion during the weekend.

https://www.bikemap.net/

• **DUCHA APP:** Free application developed in Latin America by the WWF and a local Guatemalan NGO that allows the reduction of water consumption during the shower. It is based on a song that lasts less than five minutes and guides the steps a person should take to shower without wasting water.

http://appteca.apps4citizens.org/duchapp-ahorra-agua-cancion/

• MY LITTLE PLASTIC FOOTPRINT: App designed to make its users aware of the seriousness of the marine litter and help create a solution with very specific day-to-day actions. It proposes a game with information about pollution in the oceans and the harmful effect of plastic on the environemnt, as well as personalized challenges aimed to reduce consumption.

https://mylittleplasticfootprint.org/



Top websites and guidelines that promotes sustainable lifestyles

- The Lazy Person's Guide to Saving the World: A guide provided by the United Nations with tips and recommendations according to your 'level of laziness'.

 www.un.org/sustainabledevelopment/takeaction/
- Green Meeting Guide 2009. Roll out the Green Carpet for your Participants: This guide is designed to assist organisers and hosts of small- to medium-sized meetings of up to 200 participants in "greening" their meetings and conferences.

 www.unglobalcompact.org/docs/issues_doc/Environment/Green_Meeting_Guide_WEB.pdf
- The Switchers Travel Guides: Travel guides through six Mediterranean countries (Algeria, Egypt, Jordan, Lebanon, Morocco and Tunisia) packed with eco-friendly recommendations. www.theswitchers.eu/en/travel-guides
- Guide for reducing Marine Litter: http://www.marlisco.eu/best-practice-guide.es.html

- **Let's work together:** A educational comic elaborated by UNESCO to promote education as key role in helping achieve the Sustainable Development Goals. https://unesdoc.unesco.org/ark:/48223/pf0000369006
- Anatomy of Action: A handy action set for everyday sustainable living. The Anatomy of Action outlines the top level changes any individual can make to support the growing shift to global sustainability.

www.anatomyofaction.org

- Tourism for SDGs: a guide for responsible travellers.
 http://tourism4sdgs.org/wp-content/uploads/2018/07/T4SDGsRecommendations_
 Travellers.pdf
- **FOODSAVE:** FoodSave is a project to help small and medium-sized food businesses (including restaurants, pubs, staff canteens, hotels and cafes) reduce their food waste. The first step to reduce food waste is to measure it. The food waste audit provides a simple and free step-by-step guide to measuring your food waste streams and puts actions in place to reduce it. www.foodsave.org/resource-library/diy-waste-audit/
- Love Food Hate Waste: This website helps control food consumption through a cookbook that offers dishes that you can cook with the food you have in the refrigerator and leftovers, generating a food shopping list, best ways to storage it and a consumption planner.

 www.lovefoodhatewaste.com
- **Green Office at University:** A guide and a free online course to create your own Green Office at your university: a sustainability office that informs, connects and supports your students and staff to act on sustainability.

www.greenofficemovement.org/sustainability-resources

- Recupe.net & Freecycle.org: Both are sites that facilitate donations, recovery, and support a free flea market where everyone can offer and give donations (books, clothing, home appliances, magazines, etc.) on the internet, rather than throw them away. http://recupe.net/
- **The CouchSurfing** which literally means couch surfing. The site has a lot of success in France and Europe but also in the rest of the world. The principle: travel free to the inhabitant. A great way to travel and meet new people. The couchsurfing can also allow to meet people at the local level: there are groups of discussion by city.

www.couchsurfing.com



Conclusions

Numerous educational initiatives are already implemented in the Mediterranean region which aim to increase environmental awareness, in particular, among its youngest citizens. Currently, schools, universities and NGOs are the more active entities educating for sustainable development. In a similar regard, a large number of initiatives are being launched in terms of promoting sustainable consumption. However, there is still a need to include the educational component in such initiatives to ensure that societies fully understand the potential impact of their behaviour and actions towards the environment. One clear example is the recent ban on plastic bags at grocery and alimentation shops in Europe and greater Mediterranean. A majority of consumers has perceived this measure as a drastic imposition from governments, rather than as a necessary action to protect the environment and quality of life. Adding educational tools to the environmental initiatives certainly helps to increase awareness, motivate people, to takehome lessons and further spread the word among within their community.

On the other hand, there is a clear interrelation between consumption and production, as the infinite loop of SDG 12 icon represents. However, one of the main criticisms to SDG 12 lies on its heavy orientation towards production aspects— these are easier to identify, quantify, measure and communicate. Multiple mandatory instruments have been implemented in the processes to minimize the social, economic and environmental impact of production, including bans, quality

requirements, recovery quotas, deposit-refund systems and energy labelling, among others. However, there is still a gap of understanding regarding consumption (use) and disposal of these products. These two concepts, production and consumption, are clearly interrelated, especially nowadays, where the recent growing awareness from consumers demand cleaner products, services and transparent information. Thus, this publication aims to make the initiatives and efforts made in the promotion and education of a sustainable consumption attitude more visible in society.

This collection of good practices is not meant to be comprehensive: it aims to inspire and trigger the interest of all social actors, including policy makers, educational institutions and the community as a whole, to fully embrace education programmes as a key tool to ensure sustainable development across the Mediterranean region. This publication seeks to show successful and promising cases to motivate all stakeholders to replicate the initiatives in their own communities and regions, while simultaneously demonstrating that environmental education can not only take place at schools, but everywhere, and at all levels.

All participating organisations in this publication, including the UfM, SCP/RAC and MIO-ECSDE, are committed to further support the development of strategies and actions plans for Education on Sustainable Consumption, Behaviour and Lifestyles across the Mediterranean.

"Education is the most powerful weapon you can use to change the world."

Nelson Mandela, former President of South Africa

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